AMENDMENTS TO THE SPECIFICATION:

Please replace SUMMARY OF THE ~~INVENTION~~ on Page 2, line 21, with the following:

SUMMARY OF THE DISCLOSURE

Please replace the paragraph beginning on Page 2, lines 22-27, with the following amended paragraph:

To solve the above problems, it is a first objective of the present ~~invention~~ disclosure to provide an initializing method for a VDSL, including tone space adjustment, in which a data communications link is established by a single initialization process, by enabling to switch from a first tone space mode to a second tone space mode between a handshaking process and an actual initialization process.

Please replace the paragraph beginning on Page 3, lines 29-30, with the following amended paragraph:

FIG. 2 is a flowchart for explaining an initializing method for a VDSL according to the present ~~invention~~ disclosure;

Please replace the paragraph beginning on Page 3, lines 31-32, with the following amended paragraph:

FIG. 3 is a diagram for explaining an initializing process between two stations for VDSL according to ~~a preferred~~ an embodiment of the present ~~invention~~ disclosure;

Please replace **DESCRIPTION OF THE PREFERRED EMBODIMENTS** on page 4, line 6, with the following:

DESCRIPTION OF ~~THE PREFERRED~~ EXEMPLARY EMBODIMENTS

Please replace the paragraph beginning on Page 4, lines 19-23, with the following amended paragraph:

Preferably, in the handshaking process, it is checked through message exchange whether or not there is 8.625kHz capability between the VTU-O and the VTU-R. Then, if both sides of the VTU-O and the VTU-R are capable of supporting the 8.625kHz space, the ES process according to the present ~~invention~~ disclosure begins in step 220.

Please replace the paragraph beginning on Page 4, line 24 and ending on Page 5, line 3, with the following amended paragraph:

Referring to FIG. [[3]] 2, in the present ~~invention~~ disclosure, in order to reduce time which is taken in initialization when the 8.625kHz tone space is used, an intermediate process, that is, the ES process 312 through 316, is applied to between the handshaking process 300 and the actual initialization process 320. Generally, information which is basically needed between two modems (for example, operation modes, an FFT size, a cyclic extension length, frequency band information, etc.) is exchanged in the handshaking process. This handshaking process is described in the ITU-T G.994.1 (G.HS) standard. In the actual initialization process, the two modems obtain all system parameters which are used

in Showtime (a stage in which data is actually communicated) through training,

channel estimation, data rate negotiation, etc., and apply the parameters to each of

the two modems.

Please replace the paragraph beginning on Page 5, lines 4-8, with the following amended paragraph:

In the present ~~invention~~ disclosure, this intermediate process performs a short

loop detection in step 312, using a plurality of identical signals used in the actual

initialization process, and determines whether to perform the following actual

initialization process 320 based on 8.625kHz or based on original 4.3125kHz in step

314, and then switches in a switching-available interval in step 316.

Please replace the paragraph beginning on Page 5, lines 18-26, with the following amended paragraph:

After synchronized with the VTU-O, the VTU-R decodes O-SIGNATURE-ES,

obtains needed information, and then transmits symbol R-P-TRAINING-ES to the

VTU-O. Here, symbol R-P-TRAINING-ES is substantially the same symbol as R-P-

TRAINING in the actual initialization. At the same time, [[an]] a SOC message, R-

MSG1-ES, is transmitted from the VTU-R to the VTU-O. More accurately, the R-

MSG1-ES message is encoded and embedded in the transmitted R-P-TRAINING-

ES symbol. Here, likewise, R-MSG1_ES, except a message code (ID), is

substantially the same message as R-MSG1 in the actual initialization.

Please replace the paragraph beginning on Page 7, line 26 and ending on Page 8, line 1, with the following amended paragraph:

So far, the present invention is explained with ~~preferred~~ exemplary embodiments. The 8.625kHz second tone space in the present ~~invention~~ disclosure is just ~~a preferred~~ an exemplary embodiment of the present invention at present, and can be changed according to embodiments which need tone space adjustment. Also, though the VTU-O and the VTU-R are explained as the two stations, other stations in a master-slave relation may be used. In addition, the names and types of symbols and messages which are transmitted and received between the two stations in order to detect a short loop are just examples.

Please replace the paragraph beginning on Page 8, lines 2-9, with the following amended paragraph:

As described above, according to the present ~~invention~~ disclosure, when a 8.625kHz tone space is used, a data communications link can be established with only one initialization process through the ES process according to the method and accordingly time for initialization is greatly reduced. In addition, since some identical signals used in the prior art actual initialization process are also used in the ES process, which is an intermediate process, additional hardware is not needed and in software aspect, it is easy to implement the system.

Please add the following paragraph after the paragraph on Page 8, at line 10:

The present invention has been described by way of exemplary embodiments to which it is not limited. Variations and modifications will occur to those reviewing this disclosure, which do not depart from the scope of the invention as recited in the claims appended hereto.